

PRESSURE SENSOR(PSA/ PSB SERIES)

Ordering information

PS	A	-	V	01	C	P
Series	Appearance		Pressure sort	Pressure range	Type	Output type
PS	A		V	01	C	P
				01		NPN open collector output
				1		PNP open collector output
						Standard(Cable integral type)
						Connector type
						Standard pressure type
						Vacuum pressure type
						Compound pressure type
	A					Regular square(30mm×30mm)
	B					Rectangular(10.2mm×54mm)
						Pressure Sensor

Specifications

Pressure type		Gauge pressure			
		Vacuum pressure type	Standard pressure type		Compound pressure type
Model	NPN output	PSA-V01 PSB-V01 PSB-V01C	PSA-01 PSB-01 PSB-01C	PSA-1 PSB-1 PSB-1C	PSA-C01 PSB-C01 PSB-C01C
	PNP output	PSA-V01P PSB-V01P PSB-V01CP	PSA-01P PSB-01P PSB-01CP	PSA-1P PSB-1P PSB-1CP	PSA-C01P PSB-C01P PSB-C01CP
Appearances					
		[W30×H30×L38.5mm]		[W54×H10.2×L25mm]	
Rated pressure range		0.0~101.3kPa	0~100.0kPa	0~1,000kPa	-100.0~100kPa
Display and set pressure range		5.0~101.3kPa	-5.0~110.0kPa	-50~1,100kPa	-101.3~110kPa
Max. pressure range		2 times of rated pressure		1.5 times of rated pressure	2 times of rated pressure
Applicable fluid		Air, Non-corrosive gas			
Power supply		12V~24VDC ±10% (Ripple P-P:Max. 10%)			
Current consumption		Max. 50mA			
Control output		<ul style="list-style-type: none"> NPN open collector output ⚡ Inflow current : Max. 100mA, Load voltage : Max. 30VDC, Residual voltage : Max. 1V PNP open collector output ⚡ Outflow current : Max. 100mA, Residual voltage : Max. 2V 			
Hysteresis(*1)		1 digit (2 digit/psi) fixed			2 digits fixed
Repeat error		±0.2% F.S. ±1digit			±0.2% F.S. ±2digits
Response time		Selectable 2.5ms, 5ms, 100ms, 500ms			
Short circuit protection		Including			
Analog output		Max. ±2% F.S. (Max. ±1 at 25°C)			
Display method		3½ digit LED 7Segment			
Min. display interval		1 digit (2 digits/psi unit : 2 digit fixed)			2 digits
Pressure unit		kPa, kgf/cm ² , bar, psi, mmHg, mmH ₂ O, inHg	kPa, kgf/cm ² , bar, psi		kPa, kgf/cm ² , bar, psi, mmHg, mmH ₂ O, inHg
Characteristic of control output and displayed temp.		Max. ±1% F.S. (at 25°C)			Max. ±2% F.S.
Analog output temperature characteristic		Max. ±2% F.S. of display pressure at 25°C within 0°C to 50°C			

*F.S.(Full Scale) : Rated pressure range.

*(*1) The Hysteresis is changeable in output operation of F-1 mode.

Pressure and Max. pressure display range

Type	kPa	kgf/cm ²	bar	psi	mmHg	inHg	mmH ₂ O
Vacuum pressure	0 ~ -101.3 (5.0 ~ -101.3)	0 ~ -1.034 (0.051 ~ -1.034)	0 ~ -1.034 (0.05 ~ -1.034)	0 ~ -14.70 (0.72 ~ -14.70)	0 ~ -760 (38 ~ -760)	0 ~ -29.9 (1.5 ~ 29.9)	0 ~ -103.4 (5.1 ~ 103.4)
Standard pressure	0 ~ 100.0 (-5.0 ~ 110.0)	0 ~ 1.020 (-0.051 ~ 1.122)	0 ~ 1.020 (-0.050 ~ 1.100)	0 ~ 14.50 (-0.72 ~ 15.90)	—	—	—
	0 ~ 1000 (-50 ~ 1013)	0 ~ 10.20 (-0.51 ~ 11.22)	0 ~ 10.20 (-0.50 ~ 11.00)	0 ~ 145.0 (-7.2 ~ 159.0)	—	—	—
Compound pressure type	-100.0 ~ 100.0	-1.020 ~ 1.020	-1.020 ~ 1.020	-14.50 ~ 14.50	-750 ~ 750	-29.5 ~ 29.5	-102.0 ~ 102.0

*() is max. pressure display range.

*When using a unit mmH₂O, please multiply display value by 100.

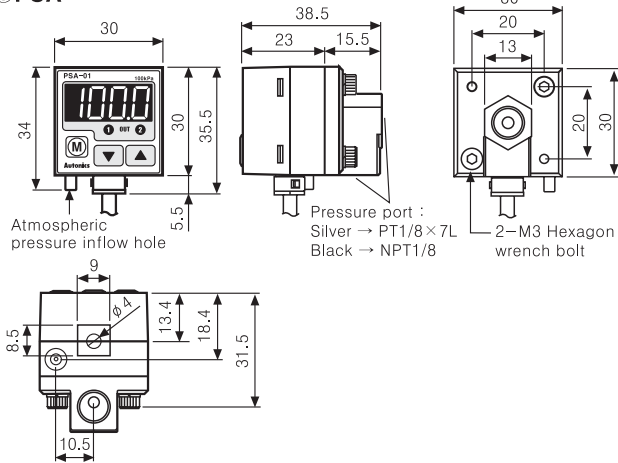
Selection Guide

PRESSURE SENSOR(PSA/ PSB SERIES)

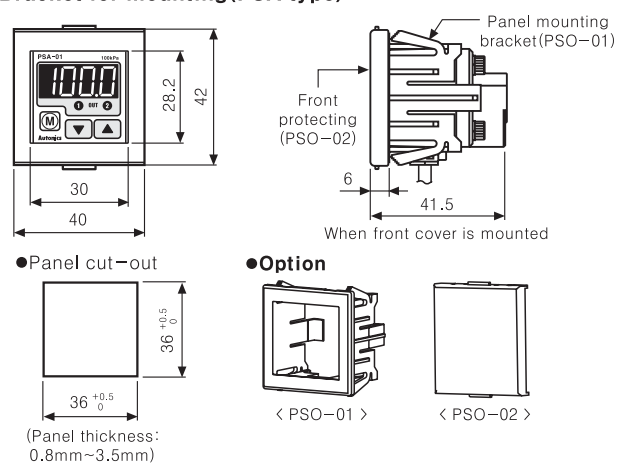
Dimensions

Unit:mm

PSA

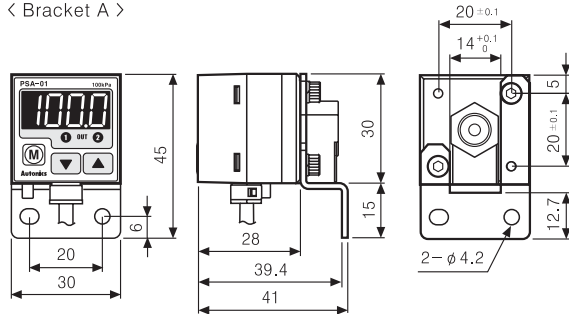


Bracket for mounting(PSA type)

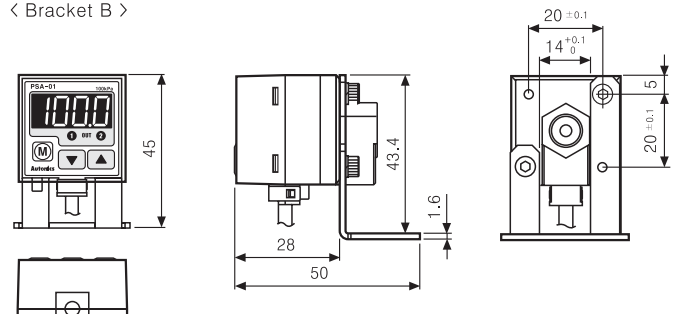


Fixing bracket for mounting(PSA type)

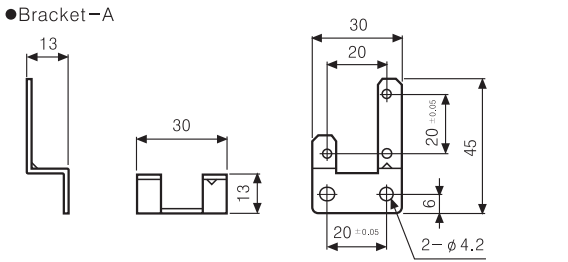
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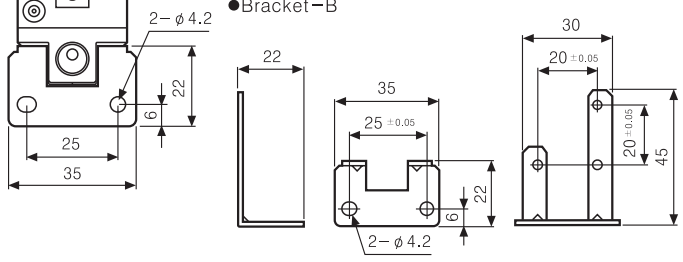
< Bracket B >



Bracket-A

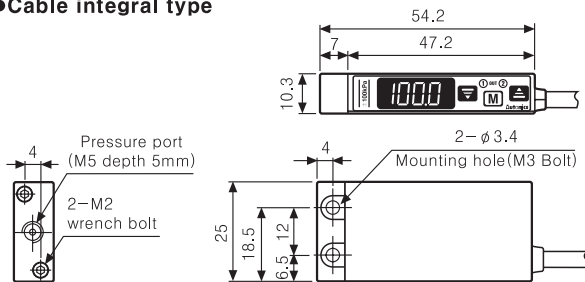


Bracket-B

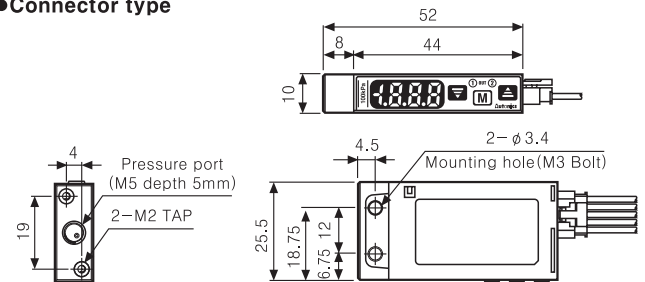


PSB

Cable integral type

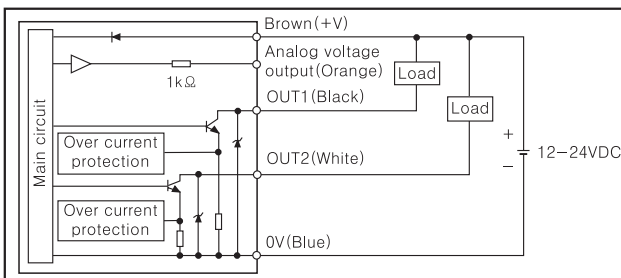


Connector type

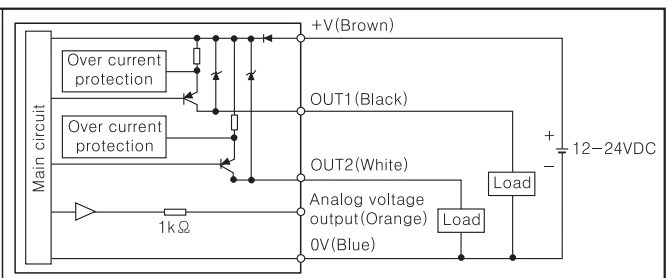


Control output diagram(PSA/PSB)

NPN open collector output



PNP open collector output



*There is no short-circuit protection in analog voltage output. Do not connect this output to power source or capacitive load directly.
*Please observe input impedance of connected equipment when use analog voltage output.
And be sure to check voltage drop caused by resistance of extended wire.